

KF Vacuum Hardware



12.1 KF CLAMPS AND CENTRING RINGS

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- KF Clamps - Standard Aluminium type with Wingnut
- KF Clamps - QUICK clamps with lever action
- KF Centring Ring - ALUMINIUM with VITON O-Ring
- KF Centring Ring - Stainless Steel with VITON O-Ring
- KF Centring Ring - OUTER TYPE with Viton O-Ring
- KF Centring Ring - REDUCER RING Aluminium with Viton O-Ring



12.2 KF FITTINGS

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- KF Flange - ALUMINIUM
- KF Flange - Stainless Steel
- KF Flange with Tube - SHORT - Stainless Steel
- KF Flange with Tube - LONG - Stainless Steel
- KF Spare O-Rings



- KF Straight Connector - Stainless Steel
- KF Conical Reducers - Stainless Steel
- KF Elbows - Stainless Steel
- KF Tee Pieces - Stainless Steel
- KF Reducing Tee Pieces - Stainless Steel

- KF 4 Way Crosses - Stainless Steel
- KF 6 Way Crosses - Stainless Steel



- KF Transparent Viewflange - Including O-Ring and clamp
- KF Mesh Protection Centring ring and O-Ring - Stainless Steel / Viton

12.3 KF FLEXIBLE HOSES

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- KF Flexible Hoses - Stainless Steel
- KF Flexible Hoses with protective braid



12.4 EVAC CLAMPS AND FITTINGS

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- 1 Sub-D
- 2 CM + DIL F/T
- 3 Coax F/T
- 4 Power High Voltage
- 5 Thermo-couple
- 6 Cables Accessories
- 7 Viewports Fiberoptic
- 8 Valves
- 9 Motion Manipulation
- 10 Process Control
- 11 CF Hardware
- 12 KF Hardware
- 13 ISO-K Hardware
- 14 Adaptors Specials
- 15 HV / UHV Chambers
- 16 Atlas Bi-Metal

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EVAC Chain-Clamps and Fittings



EVAC offers a large variety of special flanges. Here a short overview. **Please ask for a complete EVAC catalogue.**

KF:

- KF Flanges in Stainless Steel 304 and 316L
- KF Aluminium components
- KF Flanges and Components like Crosses etc. in Glass (Duran) and Quartz, "EVAC Glass TM"
- KF in the size 63KF
- Metal seals for KF which allow the UHV use of KF components
- Extended temperature range -270°C to 300°C
- High quality Chain Clamps for overpressure applications up to 20 bar



Glass components with Chain-Clamp

ISO:

- EVAC ISO tapered flanges with flats for fast Chain-Clamp closure
- Extended vacuum range down to 10^{-11} mbar
- Extended temperature range -270°C to 300°C
- Various Chain-Clamps from "Low Cost" to "High Pressure" Versions for up to 100 bar
- Glass flanges and components up to ISO-160 size



Chain-Clamps for ISO-K 63

CeFIX® Flanges:

An all-metal seal flange system without knife edge. Lower sealing force and reusable gaskets are the highlights of this design

- Sizes from NW16 to NW250
- Gaskets compatible with standard CF flange system
- Gaskets reusable up to 10 times
- Seals in Copper, Silver plated Copper, Aluminium, Nickel
- Overpressure up to 100 bar with appropriate Chain-Clamps
- Temperature range -270°C to 300°C



CeFIX Flanges with Gasket

sTerIc Clamp™:

- Ideal Flange system for biotech, food industry and pharmacy
- Can be sterilized, including Chain-Clamp
- Wide temperature range -200 to +200°C
- Pressure range 10^{-7} mbar up to 10 bar



sTerIc Clamp Flange, closed with an all metal Chain-Clamp

Allectra is an authorised Distributor for EVAC products.

ISO Flange System



13.1 ISO CLAMPS AND GASKETS

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- ISO Double Claw Clamps - Zinc plated Steel
- ISO Double Claw Clamps - Stainless Steel
- ISO Single Claw Clamps - Zinc plated Steel
- ISO Single Claw Clamps - Stainless Steel



ISO CENTRING RING WITH O-RING

- ISO Centring Ring with O-Ring - Aluminium/ Viton
- ISO Centring Ring with O-Ring - Stainless Steel/ Viton



ISO BLANKFLANGES - STAINLESS STEEL

- ISO-K Blank Flanges
- ISO-F Rotatable Bolt Rings
- ISO-F Bolt Sets for joining to Tapped Flanges



13.2 ISO-K VIEWPORT & FITTINGS

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- ISO-K Viton O-Ring sealed Viewports - Borosilicate Glass in Stainless Steel Holder
- ISO-K Flange with tube - Stainless Steel
- ISO-K Conical Reducer - Stainless Steel



ISO-K FITTINGS - STAINLESS STEEL

- ISO-K Straight Connector
- ISO-K Elbow
- ISO-K Tee Piece
- ISO-K Reducing Tee Piece



ISO SPARE O-RINGS AND FLEXIBLE COUPLINGS

- ISO Spare O-Ring - Viton
- ISO Flexible Bellows Connector - Stainless Steel

13.3 ISO-K 4- AND 6-WAY-CROSSES

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- ISO-K 4 Way Cross - TUBE Construction
- ISO-K 4 Way Cross - SPHERE Construction
- ISO-K 6 Way Cross - TUBE Construction
- ISO-K 6 Way Cross - SPHERE Construction

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ADAPTORS AND SPECIAL HARDWARE



14.1: ADAPTORS CF TO OTHER TYPES

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Adaptors from CF to KF
 Adaptors from CF to ISO-K
 Adaptors from CF to female VCR



14.2 ADAPTORS KF TO OTHER TYPES

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Adaptors from KF to ISO-K
 Adaptors KF to Swagelock



14.3 PRESSURE BURST DISCS

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Pressure Burst Discs- Stainless Steel
 Standard and Low Pressure versions



- 1 Sub-D
- 2 CM + DIL F/T
- 3 Coax F/T
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14.2 ADAPTORS CF TO OTHER TYPES

DE: Info@allectra.com
 UK: uk@allectra.com
 F: fr@allectra.com



Adaptors from CF to KF, ISO-K and VCR

Between Series Adaptors are a useful and simple way of connecting components from different flange systems. Allectra offers Adaptors between all the combinations of the most common systems.

Custom adaptors for any flange type to any other are available to order.

Various Glass to Metal Adaptors are offered on request. Please ask for details.



General Specification Adaptors

Vacuum	UHV
Material	Stainless Steel
Overall length	A
16CF to 16/25KF	36mm
40CF to 25KF	36mm
40CF to other sizes	50mm
63CF and larger	50mm
CF to ISO-K	90mm

Adaptors from CF to KF Stainless Steel

FLANGE 1	FLANGE 2	PART NUMBER
16CF	16KF	460-C16-K16
16CF	25KF	460-C16-K25
40CF	25KF	460-C40-K25
40CF	40KF	460-C40-K40
63CF	40KF	460-C63-K40
100CF	40KF	460-C100-K40

Note: Other flange combinations available on request

Adaptors from CF to ISO-K Stainless Steel A = 90mm

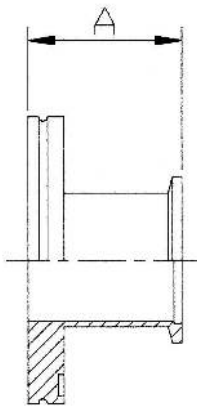
FLANGE 1	FLANGE 2	PART NUMBER
63CF	63 ISO-K	460-C63-ISO63
100CF	100 ISO-K	460-C100-ISO100
160CF	160 ISO-K	460-C160-ISO160
200CF	200 ISO-K	460-C200-ISO200

Note: Other flange combinations available on request

Adaptors from CF to female VCR Stainless Steel

FLANGE 1	VCR	PART NUMBER
16CF	1/8" (3.17mm)	460-C16-VCRF317
16CF	1/4" (6.35mm)	460-C16-VCRF635

Note: Other flange combinations available on request



Glass to Metal adaptors are available in a large variety, for example Pyrex or Quartz - open or doomed, with bellow... Please call Sales Office



- 1 Sub-D
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Adaptors KF to ISO(K)

Adaptors KF to Swagelock

KF Hose Adaptor

Adaptors can be made to order from any flange combinations in lengths as required.



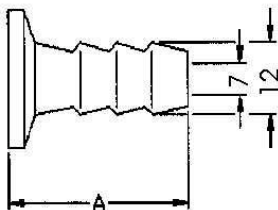
Specification KF-Adaptor

Vacuum Materials	High Vacuum Stainless Steel
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Conical adapters ISO-K 63 to KF are available on request

New in our product range:

Feedthroughs for liquids and LN, with tube endings, Swagelock connectors or VCR couplers.
 Please ask for more information.



Rubber Hose adapter in Stainless Steel -KF16 (left) and Aluminium-KF40

Adaptors from KF to ISO-K Stainless Steel A = 40mm

FLANGE 1	FLANGE 2	PART NUMBER
25KF	63 ISO-K	460-ISO63-K25
40KF	63 ISO-K	460-ISO63-K40
50KF	63 ISO-K	460-ISO63-K50
40KF	100 ISO-K	460-ISO100-K40
50KF	100 ISO-K	460-ISO100-K50

Note: Other flange combinations available on request

KF to Swagelock Adaptors STAINLESS STEEL

FLANGE	SWG SIZE	PART NUMBER
16KF	1/8" (3.17mm)	461-K16-SWG3.2
16KF	1/4" (6.35mm)	461-K16-SWG6.4
16KF	3/8" (9.52mm)	461-K16-SWG9.5

Note: Other KF Flanges and Swagelock sizes on request

Also available with CF flanges

Adaptors from KF to 12mm ID PVC Hose Stainless Steel A = 40mm

FLANGE	A	PART NUMBER
16KF	40mm	461-HN12-K16-SS
25KF	40mm	461-HN12-K25-SS
40KF	40mm	461-HN12-K40-SS
50KF	40mm	461-HN12-K50-SS

Adaptors from KF to 12mm ID PVC Hose Aluminium A = 40mm

FLANGE	A	PART NUMBER
16KF	40mm	461-HN12-K16-AL
25KF	40mm	461-HN12-K25-AL
40KF	40mm	461-HN12-K40-AL

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Pressure Burst Discs

Pressure Burst Discs are Flange mounted Membranes which are designed to rupture and release gas in the event of potentially hazardous pressures greater than atmospheric pressure.

Two versions are offered:

- Standard type with a max. overpressure of 1.7 bar
- Low Pressure type with max. 0.8 bar overpressure (0.8 bar gauge)

They are available on 16CF / 40CF / 16KF / 25KF / 40KF



Standard Version
461-PBD-C40

Specification Burst Discs Standard and Low Pressure

	Standard	Low Pressure
Vacuum		UHV
Construction	All Metal SS	
Temperature	-200 ... +350°V	
Bursting pressure		
typ. (differential)	1.2 ... 1.4 bar	0.6 ... 0.8 bar
max. (@22°C)	1.7 bar	0.8 bar
Mounting flanges	16CF / 40CF / 16KF / 25KF / 40KF	
Flow rates	150l/s (40CF/40KF), 35l/s (16CF/16KF)	
Opt. outlet flange for gas recovery	DN50KF	

Pressure Burst Disc CF Flange All Metal

FLANGE	HIGHT	PART NUMBER
16CF	48	461-PBD-C16
40CF	24	461-PBD-C40

Pressure Burst Disc KF Flanges All Metal

FLANGE	HIGHT	PART NUMBER
16KF	48	461-PBD-K16
25KF	48	461-PBD-K25
40KF	23	461-PBD-K40

Low Pressure Burst Disc CF Flange All Metal

FLANGE	HIGHT	PART NUMBER
16CF	72	461-PBD-C16-LP
40CF	72	461-PBD-C40-LP

Low Pressure Burst Disc KF Flanges All Metal

FLANGE	HIGHT	PART NUMBER
16KF	71	461-PBD-K16-LP
25KF	71	461-PBD-K25-LP
40KF	71	461-PBD-K40-LP



Standard Version
461-PBD-C16
Body diameter 45mm

A leaking LN2 cooling system can cause a very rapid pressure rise, for health and safety reasons all vacuum vessels with such a risk require a pressure burst disk.

For a full data sheet please ask the sales office or download at www.allectra.com



Low Pressure Version
461-PBD-C40-LP
Body diameter 59mm

Pressure Burst Discs with gas recovery can be built to order. Please ask Sales Office for details.

- 1 Sub-D
- 2 CM + DIL F/T
- 3 Coax F/T
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